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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,743	07/09/2003	Tong Wei Hua	CS02-010	1836

7590 10/07/2004
STEPHEN B. ACKERMAN
28 DAVIS AVENUE
POUGHKEEPSIE, NY 12603

EXAMINER

NOVOSAD, JENNIFER ELEANORE

ART UNIT	PAPER NUMBER
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3634

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,743

Applicant(s)

HUA ET AL.

Examiner

Jennifer E. Novosad

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10-14-2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1, 2, 4, 7, 11, 12, 14, 17, 21, 22, 24, and 27 are objected to because of the following informalities:

In claims 1, 11, and 21, numerous periods, i.e., ".", are improperly used throughout the body of the claims. These periods should be changed to commas (",") or semi-colons (";") since a period should only be placed at the end of a claim.

In line 2 of claims 2, 12, and 22, it appears that "cassette" should be changed to --substrate--, in view of line 4 of claims 1, 11, and 21 respectively.

In line 1 of claims 4, 14, and 24, it appears that --said-- should be inserted after "of", since the "curbing member" has already been set forth in claims 1, 11, and 21.

In line 2 of claims 7, 17, and 27, it appears that "provides" should be changed to --provide--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 8, 10, 15, 18, 20, 25, 28, and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 5 recites the limitation "the substrate size" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is noted that the size of the substrate has not been set forth nor has the size been set forth as being for example, variable in size.

The recitations "the substrate support channels... are spaced from immediately adjacent substrates" in claims 5, 15, and 25 **and** "which is the difference of the lateral offset and the substrate diameter" in claims 10, 20, and 30 render the claims indefinite. *In particular*, a substrate/wafer is not an element of the claimed device and it is improper to seek to define claimed structure based on a comparison to some unclaimed element. In this case, the boundaries of the claim cannot be properly ascertained because one would not know whether their device infringed the instant claim until someone else later added a substrate/wafer. *Accordingly*, the features of the device, itself, must be defined instead of relying upon a comparison with an ascertained element.

Claims 8, 18, and 28 are rendered indefinite since it is unclear what is being set forth and what the structural relationship between the elements is.

Claims 10, 20, and 30 recites the limitation "said sloped profile" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

Applicant is advised that should each of claims 1-10 be found allowable, each of claims 11-20 will be objected to under 37 CFR 1.75 as being substantial duplicates thereof. When two claims, claims 1 and 11, claims 2 and 12, claims 3 and 13, etc., in an application are duplicates or else are so close in content that they both cover the same thing, **despite a slight difference in**

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wording, i.e., claim 1 refers to a "substrate" and claim 11 refers to a "wafer", it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). It is noted that neither a substrate or a wafer is being positively claimed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10, 11-20, and 21-30 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,921,397 (Whalen '397).

Whalen '397 discloses a carrier comprising a cassette (10) having an upper substrate entrance (through top of Figure 1), a lower substrate support opening (see bottom of Figure 1); a first side panel (50) having an inner surface thereof, a train of parallel substrate support channels (at 97 - in between 92 in Figure 10), said support channels (97) having a bottom surface (at 99), a left side surface and a right side surface (see Figure 10), said left and right side surfaces are perpendicular to said bottom surface; a second side panel (42) opposite said first side panel (50), having, on an inner surface a matching train of parallel substrate support channels (97); an arcuate curbing member (88 and 82 - see arcuate shape in Figure 6), disposed on a left side surface in each of said channels (the arcuate curbing member 88 is disposed on the left side surface from the left side in Figure 8), and including a top end (at 88) having a sloped segment facing said entrance of said cassette permitting a substrate to slide by a necked portion of said

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substrate support channel, provided by said sloped segment, into a stepped bottom See bottom of Figure 6), therein securing said substrate; the side panels (50, 42) are fixed apart by two end panels (22, 24); the surfaces of the channels are planar (see Figure 10) and oriented in a vertical orientation. Whalen '397 is also considered to show the structure capable of performing the method steps of claim 21-30.

It is noted that the recitations of claims 4, 5, 7-10, 14, 15, 17-20, 24, 25, and 27-30 are functional recitations. *Accordingly*, a reference need only *be capable* of showing, performing, etc., these recitations in order to meet the claim without actually disclosing these references. *Thus*, the structure of Whalen '397 is considered to be capable of showing, performing, etc., these recitations, thereby meeting the language of the above noted claims.

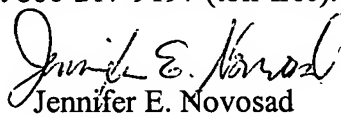
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer E. Novosad whose telephone number is (703)-305-2872. The examiner can normally be reached on Monday-Thursday, 5:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (703)-308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer E. Novosad

Examiner

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Jennifer E. Novosad/jen

October 1, 2004